



Features

- Military temperature range option
- Excellent shock & vibration resistance
- Enable / disable tristate option (> 1.0MHz)
- J-leads option

Standard Frequencies

Frequencies in MHz				
10.00000	19.20000	48.00000	64.00000	90.00000
10.15000	19.66080	49.15200	65.00000	96.00000
10.23000	20.00000	50.00000	65.53600	98.30400
10.24000	22.11840	50.75000	66.35520	100.00000
11.05920	24.00000	51.15000	72.00000	102.40000
12.00000	25.00000	51.20000	73.72800	104.00000
12.28800	32.00000	52.00000	76.80000	131.07200
12.80000	32.76800	55.29600	78.00000	132.71040
13.00000	36.86400	58.98240	80.00000	144.00000
14.74560	40.00000	60.00000	81.20000	150.00000
16.00000	40.60000	60.90000	81.84000	160.00000
16.38400	40.96000	61.38000	81.92000	
18.43200	44.23680	61.44000	88.47360	

Binary divisions of the above frequencies also available.

Enable / Disable Function

Input (pad 1)	Output (pad 3)
Open	Enabled
'1' level	Enabled
'0' level	High Impedance

Specifications

MCSO: 10.0kHz ~ 20.0MHz

MCSOH: 20.0 ~ 160MHz

Parameters	Product		Option Codes
	MCSO	MCSOH	
Frequency range: 10.0kHz ~ 20.0MHz 20.0 ~ 160MHz	■	■	
Frequency stability*: ±100ppm ±50ppm tighter stabilities on request	■ □ □	■ □ □	T specify
Operating temperature range: 0 to +70°C -40 to +85°C -55 to +125°C	■ □ □	■ □ □	A B C
Operable temperature range: -55 to +125°C	■	■	
Storage temperature range: -65 to +125°C	■	■	
Supply voltage (V_{DD}): +5.0V (±10%)	■	■	
Supply current (max): 15mA 50mA	■	■	
Driving ability: CMOS / 10 LSTTL	■	■	
Logic levels: '0' level = +0.4V max '1' level = 90%V _{DD} min	■ ■	■ ■	
Start up time: 5ms max	■	■	
Waveform symmetry: 40:60 max @ 50%V _{DD}	■	■	
Rise / fall times: 7ns max 3ns max	■	■	
Enable / disable function: None (pad 1 NC) Tristate* (control via pad 1) * not available under 1.0MHz	■ □	■ □	E
Terminations: Stand-offs J-leads (drawing on request)	■ □	■ □	J
Shock resistance: 5,000G, 0.3ms, ½ sine	■	■	
Vibration resistance: 10G rms 10.0 ~ 2,000Hz	■	■	
Soldering condition: 260°C, 10 sec max	■	■	

■ Standard. □ Optional - Please specify required code(s) when ordering

* Frequency stability is inclusive of calibration @ 25°C, operating temperature range, supply voltage change, load change and ageing over 10 years.

Ordering Information

Product name + option codes (if any) + frequency
eg: **MCSO/BE 16.0MHz** ±100ppm -40 to +85°C Enable / disable

MCSOH/TAJ 80.0MHz ±50ppm 0 to +70°C, J-leads

Option code X (eg MCSO/X) denotes a custom specification.

- ◆ Available on T&R (1k pcs/reel) or trays (50pcs/tray).
- ◆ Refer to our website for T&R and soldering details.